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May 18, 2015

Mr. Andrew Hass Remedial Project Manager (3HS21) U.S. Environmental Protection Agency 1650 Arch Street Philadelphia, PA 19103-2029

CONTRACT NUMBER:

EP-S3-07-06

PROJECT NUMBER:

045-MEME-0305

DOCUMENT NO.:

3330-045-EO-CORR-02822

SUBJECT:

Comments on the Construction Work Plan for Sheet Pile Repair

Metal Bank Superfund Site, Philadelphia, Pennsylvania

Dear Mr. Hass:

CDM Federal Programs Corporation (CDM Smith) is pleased to submit comments on the Construction Work Plan for Sheet Pile Repair dated April 2015 for the Metal Bank Superfund Site. If you have any questions or comments regarding this submittal, please contact me at (610) 263-2616.

Sincerely,

Project Manager

CDM Federal Programs Corporation

Attachments

cc:

J. Tralie, EPA Project Officer (3HS42) (letter only)

CDM Smith Program Manager (letter only)

CDM Smith Project File

CDM Smith Document Control

Comments on the Construction Work Plan Sheet Pile Repair Metal Bank Cottman Avenue Superfund Site

1. Page 2, Section 3 - Current Sheet Pile Condition

Sometimes the types of movement observed at the site are caused by inadequate deadman design. Please indicate if the original deadman design was reviewed for passive resistance.

2. Appendix A, Figure 1, General Note 11

The term "sudden change or movement" should be defined. A recommended definition is 1-inch from the original position at the start of construction, using the survey monitoring points for reference.

3. Appendix A, Figure 3

The waler rehab figure shows full penetration welds as field welds. Although field welds are the only possible way to make these connections, the following notes should be added to provide provisions that these critical connections are performed in a quality manner:

Make tack welds with the same type of electrode and incorporate into the final weld. No other tack welding will be permitted.

Do not weld when surfaces to be welded are moist or exposed to rain, snow, or wind, or when welders are exposed to inclement condition that will adversely affect the quality of work.

Do not weld or burn when the temperature is below 0° F. Preheat and maintain the temperature of the metal to at least 0° F when the temperature of the metal is between 0° and 32° during welding or burning.

Preheat the steel to the specified minimum temperature for a distance equal to the thickness of the part being welded, but not less than 3 inches in all directions from the point of welding.

Prior to placing the weld, thoroughly clean all portions of new and existing surfaces to receive weld of all foreign matter, including paint film, for a distance of 2 inches from each side of the outside lines of the weld.

Also, please show a weld specification manual that the contractor will have to abide by. The American Welding Society (AWS) publishes welding standards that should be applicable to this work.



4. Appendix A, Figure 3

There are scanned photographs on this figure depicting the relative displacements of the walers. Please explain how the contractor will winch the walers back into the same plane to make the connections noted in Sections F or J.

5. Appendix A, Figure 3

The allowable method for removing damaged portions of the walers should be specified. If heat is allowed, too much will damage good portions of adjacent steel. The contractor should be required to submit a heat monitoring procedure in the "Waler Repair Sequence and Procedures" under required submittals. If heat (torching) is not allowed, then damaged portions must be removed by mechanical means.

6. Appendix A, Figure 3

A five foot high block seems short for this wall type and may have caused the movement issues. If this is still be relied on, even with the repairs, the passive resistance should be verified.

